REMARKS

This application has been reviewed in light of the Office Action dated October 13, 2005. Claims 5, 6 and 10-26 are presented for examination. Claims 1-4 and 7-9 have been cancelled, without prejudice or disclaimer of the subject matter presented therein. Claims 5 and 6 have been amended to define still more clearly what Applicants regard as their invention. New Claims 10-26 have been added to provide Applicants with a more complete scope of protection. Claims 5, 13, 18 and 22 are in independent form. Favorable reconsideration is requested.

The Office Action rejected Claims 1 and 2 under 35 U.S.C. § 112, second paragraph, as being indefinite. Without conceding the propriety of this rejection, each of those claims has been canceled, thereby rendering their rejection moot.

Claims 1-9 were rejected under 35 U.S.C. § 102(b) as being clearly anticipated by U.S. Patent Publication No. 2002/0031972 (*Kitamura et al.*), and Claims 1-9 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,645,028 (*Dean et al.*).

Without conceding the propriety of the rejections of Claims 1-4 and 7-9, each of those claims has been canceled, thereby rendering their rejections moot.

The following comments are submitted with respect to the rejections of Claims 5 and 6.

A notable feature of the method of Claim 5 is the increasing of an applying voltage that is applied between the counter electrode and a first cathode electrode having a first electron-emitting member in the cathode electrodes, across a voltage above which an

absolute value of an inclination in F-N plots of an electron-emitting characteristic of the first electron-emitting member decreases. This reduces a difference of (i) an electron-emitting characteristic of a second electron-emitting member being operative to emit a relatively greater number of electrons when a predetermined voltage is applied between a second cathode electrode having the second electron-emitting member in the cathode electrodes and the counter electrode, and (ii) the electron-emitting characteristic of the first electron-emitting member being operative to emit a relatively lesser number of electrons when the predetermined voltage is applied between the first cathode electrode and the counter electrode.

Support for the feature "a voltage above which an absolute value of an inclination in F-N plots of an electron-emitting characteristic of the first electron-emitting member decreases", set forth in Claim 5, is provided in, for example, Fig. 5 (see points B, D and F) of the originally filed application. For example, when increasing the applying voltage to a voltage (e.g., point D) across the voltage (e.g., point B) (low voltage area) experienced by the electron-emitting member, the range (e.g. line B-C in Fig.4) can be changed (e.g., line D-E in Fig. 4). That is, a dynamic range can be widely changed. After changing the dynamic rage of an electron-emitting device, a display using the electron-emitting device has excellent gradations. Furthermore, it is possible to maintain a characteristic of the electron-emitting device long term by applying the maximum voltage (e.g., point D) prior to driving the display by a driving voltage lower than the maximum voltage.

In the rejection based on *Kitamura et al.*, the Office relied on paragraphs [0057] to [0059] of that reference. Those paragraphs state:

> [0057] In the vertical electron-emitting device, an "equalizing process" can be performed by performing the voltage applying process similar to the process performed in the "equalizing process" described later, for applying the voltage between the cathode electrode (reference numeral 123 shown in FIG. 12) where the fibrous carbon is arranged and the anode (reference numeral 126 shown in FIG. 12). Otherwise, an "equalizing process" can also be performed by performing the process similar to the voltage applying process performed in the "equalizing process" described later, for applying the voltage between the extracting electrode (reference number 122 shown in FIG. 12) and the cathode electrode provided between the cathode electrode (reference numeral 123 shown in FIG. 12) where the fibrous carbon is arranged and the anode (reference numeral 126 shown in FIG. 12).
>
> [0058] Furthermore, an "equalizing process" can also be performed by arranging an electrode plate above the cathode electrode where the fibrous carbon is provided, and performing a voltage applying process similar to the voltage applying process performed in the "equalizing process" described later between the electrode plate and the cathode electrode.
>
> [0059] The "equalizing process" introduces an "reactive gas" reactive to the fibrous carbon from the gas leading valve 22 after evacuating the vacuum chamber 20 by the vacuum pump 23. Then, a voltage is applied to the electron-emitting member 4 of fibrous carbon such that the extraction electrode 2 can be positive, and an electron is emitted from the electron-emitting member 4 of fibrous carbon. Then, the electron-emitting member 4 of fibrous carbon proceeds with the above mentioned reaction toward right by means of the heat from the electron emission, etc., thereby etching the fibrous carbon (FIG. 2A).

With regard to *Dean et al.*, the Office Action states "(see the waveform 180 in Fig. 1 and its corresponding description, note that the voltage being applied in time period t3-t4 is higher than the driving voltage being applied in time period t5-t6)." The Office Action appears to suggest that those features of *Dean et al.* correspond to a driving

voltage V smaller than the maximum applied voltage Vmax between a cathode electrode and counter electrode to drive electron-emitting devices.

However, it is respectfully submitted that nothing in either *Kitamura et al.* or *Dean* would teach or suggest a voltage above which an absolute value of an inclination in F-N plots of an electron-emitting characteristic of a first electron-emitting member decreases, as set forth in Claim 5. That is, *Kitamura et al.* and *Dean* do not disclose or suggest increasing an applying voltage that is applied between the counter electrode and a first cathode electrode having a first electron-emitting member in the cathode electrodes, across a voltage above which an absolute value of an inclination in F-N plots of an electron-emitting characteristic of the first electron-emitting member decreases, as set forth in Claim 5.

Accordingly, Claim 5 is not anticipated by either *Kitamura et al.* or *Dean et al.*, and thus that claim is believed to be clearly patentable over those references.

Independent Claims 13, 18 and 22 also recite an increasing step that is similar in many relevant respects to that set forth in Claim 5 emphasized above, and also are believed clearly patentable over *Kitamura et al.* and *Dean et al.* for substantially the same reasons as those set forth above because neither reference teaches or suggests such a step.

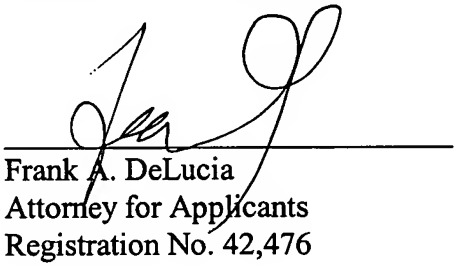
The other claims in this application are each dependent on one or another of the independent claims discussed above, and also are believed to be patentable over the art relied on in the Office Action for the same reasons as are those independent claims. Since each dependent claim is deemed to define an additional aspect of the invention, however,

the individual consideration or reconsideration, as the case may be, of each on its own merits is respectfully requested.

In view of the foregoing remarks, Applicants respectfully request favorable reconsideration and early passage to issue of the present application.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,



Frank A. DeLucia
Attorney for Applicants
Registration No. 42,476

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200

NY_MAIN 546981v1